NAMAN YESHWANTH KUMAR

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EDUCATION

Master of Science **Expected: May 2026**
Arizona State University - Computer Eng (GPA 3.8/4.0) **Tempe, AZ**

- Relevant course work: VLSI, Foundations of Algorithms, Reinforcement Learning in Robotics, Artificial Intelligence, Perception in Robotics, Hardware Co-design, SoC Design, Advanced Computer Architecture

Raspberry Pi Self-Driving Car **Feb 2022 - July 2022**

- Developed an autonomous vehicle using C++ and Python on Raspberry Pi, implementing lane detection and traffic sign recognition via real-time camera data processing.
- Integrated hardware components using I2C protocols and optimized motor control logic for smooth trajectory tracking, winning Best Project Award in the EEE Department.

Bachelor of Engineering **June 2022**
BMS College of Engineering - Electrical and Electronics Eng **Bengaluru, India**

TECHNICAL SKILLS

Languages: C++ | Python | Java/Kotlin | SQL | MATLAB | Shell Script | JavaScript | HTML | CSS
Embedded & Robotics: Embedded Systems | RTOS | Sensor Fusion | ROS/ROS 2 | Computer Vision | I2C/UART/SPI | Arduino | Raspberry Pi
Cloud & Tools: AWS | Docker | Google Cloud Platform (GCP) | Git | CI/CD | TensorFlow | PyTorch | GEN AI
Hardware & Design: SystemVerilog | Synopsys DC | Cadence Innovus | Simulink | Ansys Maxwell | LTspice

WORK EXPERIENCE

Software Developer **October 2022 - April 2024**
NCR GOLD **Bengaluru, India**

- Contributed to production code for a custom Django ordering platform, processing 10,000+ orders; streamlined inventory and billing for a wholesale business, directly impacting core product efficiency.
- Engineered a scalable full-stack solution using Docker and AWS cloud services, ensuring seamless updates and robust infrastructure performance.

Research Intern **October 2021 - August 2022**
Indian Institute of Science **Bengaluru, India**

- Led the Propulsion Circuit Team, optimizing a 1.5kW axial flux BLDC motor with Ansys Maxwell; boosted efficiency and responsiveness by upgrading material and coil designs and implementing a new FOC system.
- Conducted advanced research on speed control algorithms and battery management systems for eVTOL aircraft leveraging Simulink, contributing to notable improvements in efficiency and reliability of aircraft propulsion systems.

PROJECT EXPERIENCE

Trezzit - Full Stack Bill Splitting Application **February 2025 - Present**

- Engineered Trezzit, a full-stack expense management application that solves the dual challenges of intuitive item-wise bill splitting and integrated personal finance tracking using AI-powered categorization.
- Managed the complete project lifecycle, acquiring and supporting an initial beta community of 120+ active users from the ASU student body.
- Currently leading the next phase of growth, focused on scaling the user base to 1,000 members on campus by leveraging iterative development and community feedback. Tech Stack: Django | React | Google Generative AI (Gemini) | Material-UI | Docker

Intel Automated Self-Checkout (Open Source Contributor) **January 2025 - February 2025**

- Developed a framework in Python to publish and analyze LiDAR sensor data for autonomous checkout systems; successfully merged contributions to the main branch after comprehensive code review.
- Leveraged Docker and CI/CD pipelines, collaborating with a distributed team to enhance sensor fusion accuracy.

Raspberry Pi Self-Driving Car **February 2022 - July 2022**

- Developed an autonomous vehicle using Raspberry Pi and Arduino, featuring lane detection, traffic sign recognition, and seamless integration via the I2C communication protocol.
- Streamlined data collection and neural network training with a Bluetooth joystick mode in a collaborative team effort; project received the Best Project Award in the EEE Department among approximately 40 submissions.

AWARDS & HONORS

- Won 'Best Use of AI' at DevHacks'25 for AdaptED AI, a platform leveraging Google's Gen AI to create personalized learning paths.
- Top Ten Team in e-Yantra National Robotics Competition (IIT Bombay) for designing a self-balancing robot on CoppeliaSim.